

### Amendments

What is claimed is:

- [c1] (Currently Amended) A method for applying a target reflector to an object for photogrammetric analysis, comprising:
- mixing a diffuse material with a solvent, where the diffuse material has a high index of refraction so that the diffuse material will reflect light from a light source across an array of angles;
  - applying the diffuse material and the solvent to the surface of the object so that the diffuse material bonds with the surface of the object; and
  - applying a reflective coating to the surface of the object over the diffuse material and solvent, where the diffuse material forms a target reflector underneath the reflective coating.
- [c2] (Original) The method of claim 1, where the object comprises a thin film polymer membrane.
- [c3] (Original) The method of claim 2, where the polymer membrane has a thickness between 1.0 and 25.0 microns.
- [c4] (Original) The method of claim 2, where diffuse material comprises fibers of the same polymer as the membrane.
- [c5] (Original) The method of claim 1, where the diffuse material comprises micro-beads.
- [c6] (Original) The method of claim 5, where the micro-beads are made of glass.
- [c7] (Original) The method of claim 1, where the diffuse material bonds with the surface of the object by melting.

- [c8] (Original) The method of claim 1, where the diffuse material comprises a luminous material.
- [c9] (Original) The method of claim 1, where the reflective coating is a reflective metallized coating.
- [c10] (Original) The method of claim 9, where the reflective metallized coating is an evaporative material.
- [c11] (Canceled)
- [c12] (Original) The method of claim 9, where the reflective metallized coating comprises aluminum.
- [c13] (Original) The method of claim 9, where the reflective metallized coating comprises gold.
- [c14] (Original) The method of claim 9, where the reflective metallized coating comprises silver.
- [c15] (Original) The method of claim 9, where the reflective metallized coating comprises germanium.
- [c16] (Original) The method of claim 9, where the reflective metallized coating comprises chromium.
- [c17] (Original) The method of claim 9, where the reflective metallized coating has a thickness of between 200 – 1200 Angstroms.
- [c18] (Original) The method of claim 1, where the diffuse material and the solvent are applied with a jet sprayer.

- [c19] (Original) The method of claim 1, where the diffuse material and the solvent are applied through a template that is overlayed on the surface of the object.
- [c20] (Currently Amended)A method for applying a target reflector to an object for photogrammetric analysis, comprising:  
step for applying a diffuse material to the surface of the object,  
where the diffuse material has a high index of refraction so that the diffuse material will reflect light from a light source across an array of angles; and  
step for applying a reflective material over the surface of the object.
- [c21] A method for applying a target reflector to an object for photogrammetric analysis, comprising:  
applying a reflective coating to the surface of the object; and  
forming the target reflector on the reflective coating by chemical etching.
- [c22] A method for applying a target reflector to an object for photogrammetric analysis, comprising:  
applying a reflective coating to the surface of the object; and  
forming the target reflector on the reflective coating by laser etching.
- [c23] A method for applying a target reflector to an object for photogrammetric analysis, comprising:  
applying a reflective coating to the surface of the object; and  
forming the target reflector on the reflective coating by mechanical abrasion.
- [c24] (Currently Amended)A method for applying a target reflector to an object for photogrammetric analysis, comprising:

casting a diffuse material in a film, where the diffuse material has a high index of refraction so that the diffuse material will reflect light from a light source across an array of angles;

punching segments of the diffuse material from the film and onto to the surface of the object, where the segments of diffuse material are held in place with adhesive; and

applying a layer of reflective metallized coating to the surface of the object, where the segments of diffuse material form target reflectors on the surface of the object.

[c25] (Currently Amended) A method for applying a target reflector to an object for photogrammetric analysis, comprising:

applying a liquid solution of membrane material to a substrate, where the substrate has at least one diffuse areas on its surface;

curing the liquid solution of membrane material to form a membrane, where the diffuse area of the substrate form a diffuse area in the membrane, where the diffuse area in the membrane has a high index of refraction so that the diffuse material will reflect light from a light source across an array of angles;

removing the membrane from the substrate; and

applying a reflective coating to the surface of the object, where the diffuse area of the membrane forms a target reflector.

[c26] (Currently Amended)A method for applying a target reflector to an object for photogrammetric analysis, comprising:

step for forming a diffuse area on a membrane that casts the object, where the diffuse area in the membrane has a high index of refraction so that the diffuse material will reflect light from a light source across an array of angles; and

step for applying a reflective material over the membrane so that a target reflector is formed on the object.